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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,224	03/23/2004	Marc R. Cossement	25384A	3310

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OWENS CORNING  
2790 COLUMBUS ROAD  
GRANVILLE, OH 43023

EXAMINER
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RUDDOCK, ULA CORINNA

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/807,224

Applicant(s)

COSSEMENT ET AL.

Examiner

Ula C. Ruddock

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 and 21-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 21-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. The Examiner has carefully considered Applicant's amendment and accompanying remarks filed January 9, 2006. In view of Applicant's amendment, the rejection in view of O'Briene-Bernini et al. (US 2004/0122166) alone has been overcome. However, after an updated search, additional prior art has been found which renders the invention as currently claimed unpatentable for reasons herein below.

#### ***Claim Objections***

2. Claim 6 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 6 requires that the "binder composition has a pre-binder composition:co-binder ratio of from 90:10 to 25:75," but depends on claim 1 which requires that the co-binder is present in the binder composition in an amount of at least about 50%. Claim 6 fails to further limit claim 1, but instead broadens the scope of claim 1.

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-7 and 21-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Briene-Bernini et al. (US 2004/0122166) in view of Floyd et al. (US 5,026,746). O'Briene-Bernini

discloses a polyacrylic acid based binder composition (abstract) comprising a polyacrylic acid, a crosslinking agent (such as triethanolamine or glycerol) [0030], a catalyst comprising sodium hypophosphate or sodium phosphate [0031], and an extender comprising maltodextrin [0046 and claim 12]. The maltodextrin:polyacrylic acid ratio is set at 1%, 5%, 15%, 30%, and 45% [0046].

O'Briene-Bernini discloses the claimed invention except for the specific teaching that the co-binder (i.e. dextrin) is present in the binder composition in an amount of at least 50% and that the dextrin is at least one member selected from yellow dextrans, white dextrans and British gums.

Floyd et al. (US 5,026,746) disclose starch based binder composition for non-woven fibers or fabrics made of fiberglass (col 2, ln 12-14). The starch used in the composition can be a maltodextrin (col 3, ln 5) and the monomers include acrylic acid (col 4, ln 21). The ratio of monomer to starch may be varied from about 1:50 to about 15:1, preferably from about 1:1 and to about 7:1 (col 4, ln 24-26). Preferred dextrans include white dextrans, canary dextrans, and British gums (col 3, ln 49-50). A cross-linking agent (col 6, ln 27) and a catalyst (col 5, ln 13-15) is also present in the composition. The catalyst amount ranges from about 0.1-10% by weight of the monomer.

It would have been obvious to have used Floyd's disclosure that the co-binder is present in the amount of at least about 50% and that the pre-binder composition is present in an amount from 1-50% in the composition of O'Briene-Bernini, motivated by the desire to create a composition that will reduce the stretching of the fibrous material (i.e. less elongation) and to improve the water resistance of the article. It also would have been obvious to have used Floyd's disclosure of the Applicant's preferred dextrans (i.e. white dextrans, canary dextrans, and British gums) as the dextrans in O'Briene-Bernini, motivated by the desire to create a binder composition with improved recovery.

It also would have been obvious to have used Floyd's disclosure of a catalyst present in the amount of 0.1-10% in the composition of O'Briene-Bernini, motivated by the desire to create a composition that will have a high molecular weight consistent with small particle size.

***Response to Arguments***

5. Applicant's arguments with respect to claims 1-7 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ula C. Ruddock whose telephone number is 571-272-1481. The examiner can normally be reached on Monday-Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H. Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

UCR

*UCR*

*Ula Ruddock*  
**ULA RUDDOCK**  
**PRIMARY EXAMINER**